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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,688

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EXAMINER

GEBRIEL, SELAM T

ART UNIT

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2622

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/676,688	Applicant(s) FABINSKI ET AL.	
	Examiner SELAM T. GEBRIEL	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 12-14 have been renumbered 11-13.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**Electronic structure** and **Amplifier**” on, claims 4, 9 and 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 9 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim limitation **"Electronic structure for preventing charge from passing to an amplifier for identifying the embedded digital signal"** is not described in the specification or shown in the drawing in such a way to convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Clarification is required to reasonably examine the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 5 and 9, 10, 11, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dennis (US 2002/0114526).

7. Regarding Claim 1, Dennis discloses an image sensor (Figure 1) comprising:
(a) a substrate(Well known) having a plurality of photosensitive sites (Figure 1, Element 10) for capturing an image and a plurality of additional photosensitive sites (Figure 1, Element 20) adjacent the image capturing photosensitive sites in which there is no image capture (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2) ; and
(b) a digital signal embedded (Encode data, such as product codes) in one or more of the additional photosensitive sites for the purpose of identification (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2).

8. Regarding Claim 2, Dennis further discloses the image sensor as in claim 1, wherein the digital signal identifies individually or in any combination particular manufacturer, lot, wafer, and/or position on the wafer during manufacture of the image sensor. (Page 1, Paragraph 002, Page 1, Paragraph 0012 and Page 0013, Line 1 – 2).

9. Regarding Claim 3, Dennis further discloses the image sensor as in claim 1 wherein the embedded digital signal includes a watermark for electronic identification of the sensor without affecting any aspect of the image captured by the plurality of sites used to capture the image (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2, No image will be outputted for the non - photosensitive area or Figure 1, Element 20 of the reference therefore it does not affect any aspect of the image captured by the photosensitive area).

10. Regarding Claim 4, Dennis further discloses the image sensor as in claim 1 further comprising an electronic structure (Figure 1, Element 16) for preventing charge from passing to an amplifier for identifying the embedded digital signal.

11. Regarding Claim 5, Dennis further discloses a method for creating an image sensor (Figure 1) comprising the steps of:

(a) providing a substrate (Well known) having a plurality of photosensitive sites (Figure 1, Element 10) for capturing an image and a plurality of additional photosensitive sites (Figure 1, Element 20) adjacent the image capturing photosensitive sites in which there is no image capture (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2); and

(b) embedding a digital signal (Encode data, such as product codes) in one or

more of the additional photosensitive sites for the purpose of identification (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2).

12. Regarding Claim 9, Dennis further discloses the method as in claim 5 further comprising providing an electronic structure (Figure 1, Element 16) for preventing charge from passing to an amplifier for identifying the embedded digital signal.

13. Regarding Claim 10, Dennis further discloses an image capture device (Imaging system, Page 1 and 2, Paragraph 0016) comprising:

(a) an image sensor (Figure 1) comprising:

(a1) a substrate having a plurality of photosensitive sites (Figure 1, Element 10) for capturing an image and a plurality of additional photosensitive sites (Figure 1, Element 10) adjacent the image capturing photosensitive sites in which there is no image capture (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2); and

(a2) a digital signal embedded (Encode data, such as product codes) in one or more of the additional photosensitive sites for the purpose of identification (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2).

14. Regarding Claim 11, Dennis further discloses the image capture device as in claim 10, wherein the digital signal identifies individually or in any combination particular manufacturer, lot, wafer, and/or position on the wafer during manufacture of the image sensor (Page 1, Paragraph 002, Page 1, Paragraph 0012 and Page 0013, Line 1 – 2).

15. Regarding Claim 12, Dennis further discloses the image capture device as in claim 10, wherein the embedded digital signal includes a watermark for electronic identification of the sensor without affecting any aspect of the image captured by the plurality of sites used to capture the image (Page 1, Paragraph 0012 and Page 0013, Line 1 – 2, No image will be outputted for the non - photosensitive area or Figure 1, Element 20 of the reference therefore it does not affect any aspect of the image captured by the photosensitive area).

16. Regarding Claim 13, Dennis further discloses the image capture device as in claim 10 further comprising an electronic structure (Figure 1, Element 16) for preventing charge from passing to an amplifier for identifying the embedded digital signal.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 6 and 7 are rejected under U.S.C. 103(b) as being unpatentable in view of Dennis (US 2002/0114526).

19. Regarding claims 6, 7 and 8 as analyzed with respect to claim 5, Dennis does not disclose using a method of etching.

OFFICIAL NOTICE is taken that is well known to uses Photo-lithographic processes such as etching. Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to provide the image sensor with apertures or opening by etching using a predefined sequence or predefined pattern provided on the images sensor in order to create a watermark identification of the sensor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SELAM T. GEBRIEL whose telephone number is (571)270-1652. The examiner can normally be reached on Monday-Thursday 7.30am-5.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu NgocYen can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.G.
Thursday, February 28, 2008

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Supervisory Patent Examiner, Art Unit
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